*भारतीय मानक*

***Indian Standard***

**IS 12924 : 2023**

# बूरा — विशिष्टि

*( पहला पुनरीक्षण )*

# Bura — Specification

*( First Revision )*

ICS 67.180.10

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भारतीय मानक ब्यूरो

BUREAU OF INDIAN STANDARDS

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**May 2023** **Price Group 4**

Sugar Industry Sectional Committee, FAD 02

FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Sugar Industry Sectional Committee had been approved by the Food and Agriculture Division Council.

*Bura* is the product made by recrystallization of any kind of sugar or *Khandsari* sugar and made into fine free flowing powder. *Bura* is being produced in a considerable quantity in the country.

This is standard was originally published in 1990. In this first revision of this standard, the types of *Bura*, namely, white *Bura* and yellow *Bura* have been omitted. Requirements for reducing sugar, loss on drying, acid insoluble and sulphur dioxide have been modified. Amendment No. 1, 2 and 3 have been incorporated.

In the formulation of this standard, due consideration has been given to the provisions of the *Food Safety and Standards Act*, 2006 and the rules framed thereunder and *The Legal Metrology (Packaged Commodities) Rules*, 2011. However, this standard is subject to the restrictions imposed under these, wherever applicable.

The composition of the committee responsible for the formulation of this standard is listed at Annex B.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of test or analysis, shall be rounded off in accordance with IS 2 : 2022 ‘Rules for rounding off numerical values (*second revision*)’. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

*Indian Standard*

# BURA — SPECIFICATION

*( First Revision )*

## 1 SCOPE

This standard prescribes the requirements and methods of test for *Bura* manufactured by any kind of sugar.

## 2 REFERENCES

The following standards contain provisions which through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below:

| *IS No.* | *Title* |
|---|---|
| IS 1070 : 1992 | Reagent grade water — Specification (*third revision*) |
| IS 1943 : 1995 | Textiles — A-twill jute bags (*second revision*) |
| IS 10146 : 1982 | Specification for polyethylene for its safe use in contact with foodstuffs, pharmaceuticals and drinking water |
| IS 10910 : 1984 | Specification for polypropylene and its copolymers for its safe use in contact with foodstuffs, pharmaceuticals and drinking water |
| IS 14968 : 2015 | Textiles — High density polyethylene (HDPE)/polypropylene (PP) woven sacks for packing 50 kg/25 kg sugar — Specification (*first revision*) |
| IS 15279 : 2003 | Sugar and sugar products — Methods of test |

## 3 REQUIREMENTS

### 3.1 Description

*Bura* shall be prepared by re-crystallization of any kind of sugar and shall be in the form of free flowing amorphous powder.

**3.2** *Bura* shall be sweet to taste and shall not possess sour salty or any other objectionable taste.

**3.3** The material shall be free from other extraneous matter and substances deleterious to health. It shall also be free from iron filings and added colouring matter.

**3.4** The material shall also comply with the requirements of Table 1.

## 4 SAMPLING

Sampling shall be done as agreed to between the purchaser and the supplier.

## 5 TESTS

**5.1** Tests shall be carried out in accordance with methods prescribed in col 4 of Table 1.

### 5.2 Quality of Reagents

Unless specified otherwise, pure chemicals shall be employed in tests and distilled water (*see* IS1070) shall be used where the use of water as a reagent is intended.

NOTE — ‘Pure chemicals’ shall mean chemicals shall not contain impurities which affects the results of analysis.

## 6 PACKING AND MARKING

### 6.1 Packaging

*Bura* sugar shall be packed in clean, sound and new jute bags (*see* IS 1943) or bags made of polypropylene (*see* IS 10910) or bags made of high density polyethylene (*see* IS 10146). The jute bags may be lined with polyethylene film. The mouth of each bag shall be either machine-stitched or rolled over and hand-stitched. If hand-stitched, the stitches shall be in two rows with at least 14 stitches in each row (*see* IS 14968).

**6.2** In the case of smaller consumer packs the product shall be packed in food grade plastics conforming to relevant Indian Standard or any other suitable food grade non-toxic material.

## 6. MARKING

**6.1** Each bags/packs shall bear legibly and indelibly the following particulars:

a) Name of the product;

b) Name and address of the manufacturer;
c) Month and year of manufacture;
d) Batch or code number;
e) Net quantity;
f) Expiry date in month and year, and
g) Any other information required under *The Legal Metrology* (*Packaged Commodities*) *Rules*, 2011 and *The Food Safety and Standards* (*Packaging and Labeling*) *Regulations*, 2011.

**6.2 BIS Certification Marking**

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act*, 2016 and the Rules and Regulations framed thereunder, and the products may be marked with the Standard Mark.

**Table 1 Requirements for *Bura***
(*Clause*s 3.4 *and* 5.1)

| **Sl No.** | **Characteristics** | **Requirement** | **Method of Test, Ref to** |
|---|---|---|---|
| (1) | (2) | (3) | (4) |
| i) | Polarization, $^{o}$Z, *Min* | 93.0 | Clause **5** of IS 15279 |
| ii) | Reducing sugar, percent by mass, *Max* | 2.5 | Clause **7** of IS 15279 |
| iii) | Loss on drying, percent by mass, *Max* | 1.0 | Clause **4** of IS 15279 |
| iv) | Sulphur dioxide mg/kg, *Max* | 50 | Clause **13** of IS 15279 |
| v) | Ash insoluble in dilute hydrochloric acid, (on dry basis), percent by mass, Max | 0.25 | Annex A |
| vi) | Sulphated ash, percent by mass, *Max* | 0.6 | Clause **9** of IS 15279 |

## ANNEX A
[*Table* 1, *Item* (v)]

## DETERMINIATION OF ACID INSOLUBLE ASH

### A-1 REAGENT

**A-1.1 Dilute Hydrochloric Acid** — Approximately 5 N (prepared from concentrated hydrochloric acid).

### A-2 PROCEDURE

**A-2.1** Weigh accurately about 5 g of the sample in a tared, clean and dry platinum basin of 100 ml capacity. Carbonize the material in the dish with the flame of a burner. Complete the ignition by keeping in a muffle furnace at (550 ± 25) ºC until grey ash results. Cool in a desiccator. To the ash, add 25 ml of the dilute hydrochloric acid, cover with a watch glass and heat on a small flame of a burner to near boiling, allow to cool and filter the contents of dish through whatman filter paper no. 42 or its equivalent. Wash the filter paper with hot water until the washings are free from chlorides. Return the filter paper and the residue to the dish. Keep it in an air-oven maintained at (105 ± 2) ºC for about 3 hours, Ignite in the muffle furnace at (550 ± 25) °C for one hour. Cool the dish in a desiccator and weigh. Heat again for 80 minutes in the muffle furnace, cool and weigh. Repeat this process of
heating for 30 minutes, cooling and weighing till the difference between two successive weighing is less than one milligram. Note the lowest mass.

### A-3 CALCULATION

**A-3.1** Acid insoluble ash, percent by mass =

$$\frac{100\ M_1}{M_2}$$

where

$M_1$ = mass, in g, of acid insoluble ash; and

$M_2$ = mass, in g, of sample taken for the test.

**ANNEX B**

(*Foreword*)

**COMMITTEE COMPOSITION**

Sugar Industry Sectional Committee, FAD 02

| *Organization* | *Representative*(*s*) |
|---|---|
| National Sugar Institute, Kanpur | SHRI NARENDRA MOHAN **(*Chairperson*)** |
| Army Service Core (ASC), New Delhi | LT COL B. B. SAHU |
| CONCERT, Chennai | SHRI R. SANTHANAM<br>SHRI M. SOMASUNDARAM (*Alternate*) |
| Consumer Guidance Society Of India, Mumbai | SHRI SITARAM DIXIT<br>DR M. S. KAMAT (*Alternate*) |
| Food Corporation of India, New Delhi | SHRI DEEPAK KUMAR PANWAR<br>SHRI RAKESH KUMAR RANJAN (*Alternate*) |
| Food Safety Standards Authority of India, New Delhi | MS APOORVA SRIVASTAVA |
| Global Cane Sugar Ltd, New Delhi | DR G. S. C. RAO<br>SHRI ANIL SRIVASTAVA (*Alternate*) |
| Indian Institute of Sugarcane Research, Lucknow | DR A. D. PATHAK<br>DR A. K. SHARMA (*Alternate*) |
| Indian Institute of Toxicology Research, Lucknow | DR YOGESHWER SHUKLA |
| Indian Sugar Exim Corporation, New Delhi | SHRI RAJIV AGGARWAL<br>SHRI RAJEEV KURUP (*Alternate*) |
| Indian Sugar Mills Association, New Delhi | SHRI G. K. THAKUR<br>SHRI DEEP MALIK (*Alternate*) |
| MAARC Labs, Pune | DR VASUDHA KESKAR |
| MANAS Industry, Maharashtra | SHRI JEEVAN VASANT JADHAV |
| Ministry of Consumer Affairs, Food & Public Distribution, New Delhi | SHRI SURESH CHANDRA |
| National Co-Operative Development Corporation, New Delhi | SHRI K. P. VAISH<br>SHRI N. K. SHARDA (*Alternate*) |
| National Federation of Co-Operative Development Corporation, New Delhi | SHRI PRAKESH P. NAIKNAVARE<br>SHRI S. SOMASUNDARAM (*Alternate*) |
| The Sugar Technologists Association of India, New Delhi | SHRI SANJAY AWASTHI<br>SHRI ANURAG GOYAL (*Alternate*) |
| Triveni Engineering & Industries Limited, Muzaffar nagar, UP | SHRI RAJESH SINGH<br>SHRI P. K. KHADELWAL (*Alternate*) |
| Tamil Nadu Sugar Corporation Limited (TASCO), Chennai | SHRI E. MUTHUVELAPPAN |

| *Organization* | *Representative*(*s*) |
|---|---|
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| Walchand nagar Industries, Mumbai | SHRI D. R. SARDESHMUKH<br>SHRI P. V. KAWADE (*Alternate*) |
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*Member Secretary*
SHRI RAJPAL
SCIENTIST 'D'/JOINT DIRECTOR
(FOOD AND AGRICULTURE), BIS

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## Amendments Issued Since Publication

| Amend No. | Date of Issue | Text Affected |
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